

## A new genus of the family Theridiidae (Arachnida: Araneae)

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**Abstract** — A new genus of the family Theridiidae is described under the name of *Yunohamella*. Three species, *Yunohamella yunohamensis* (Bösenberg & Strand 1906), *Y. subadulta* (Bösenberg & Strand 1906) and *Y. lyrica* (Walckenaer 1842), are newly transferred from *Takayus* Yoshida 2001.

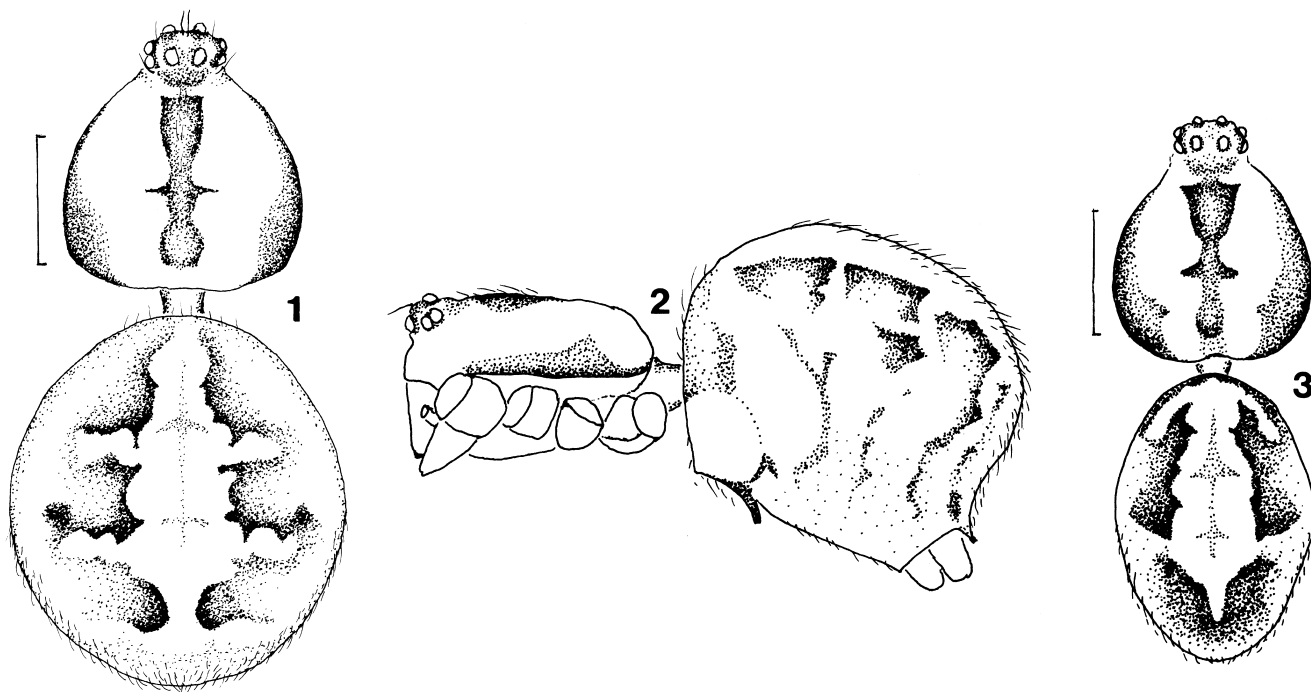
**Key words** — *Yunohamella*, Theridiidae, new genus, new combination

In my previous paper (Yoshida 2001), I described a new genus *Takayus* on the basis of the following characteristics: epigynum with a small scapus, embolus of male palpus thick, not circulated, and conductor and large tegulum of male palpus forming one sclerite. I also designated two species groups in this genus, those are the *takayensis* group and the *yunohamensis* group.

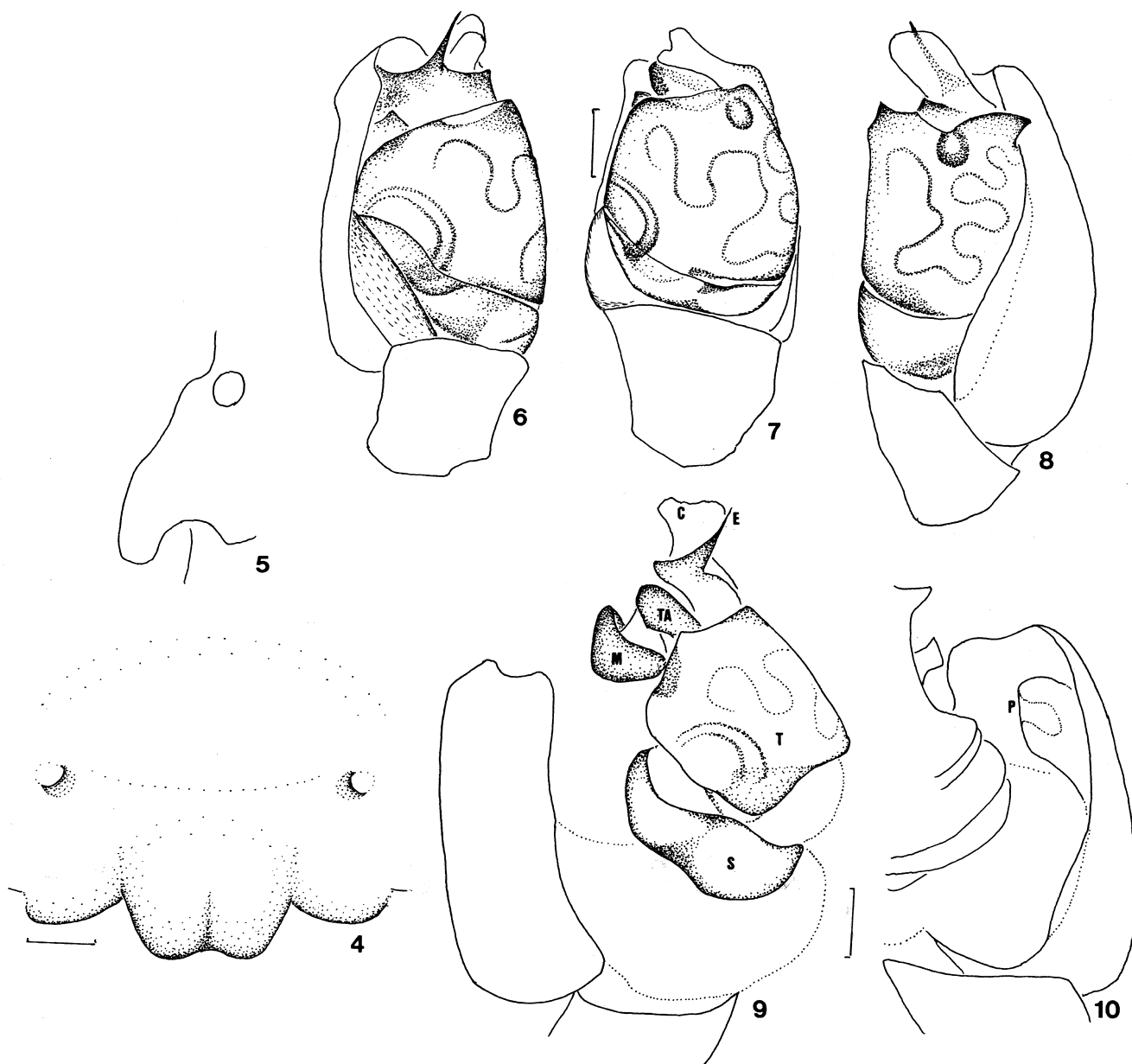
Characteristics of the *takayensis* group are bright color of body, feather-like flecks on abdomen, a pointed scapus of epigynum, and a thick embolus and a large tegular apophysis of male palpus (Yoshida 2003, figs. 222–232, 569–571, 602–606). Contrary to these, the *yunohamensis* group has many different characteristics from the *takayensis*

group, which are dark color of body, wavy cardiac pattern on abdomen, blunt or without scapus of epigynum, and a thin embolus and a small tegular apophysis of male palpus (Figs. 1–10; Yoshida 2003, figs. 233–242, 530, 572–573). In addition to these, spiders of the *takayensis* group make webs in bushes, but those of the *yunohamensis* group usually live on precipices of rocks. I consider that the differences between the two groups correspond to the level usually recognized between the genera in the family Theridiidae. In this paper, I wish to establish a new genus on the basis of the species group of *T. yunohamensis* of the genus *Takayus* designated by Yoshida (2001).

As a result of this division, the genus *Takayus* (s. str.)



**Figs. 1–3.** *Yunohamella yunohamensis* (Bösenberg & Strand 1906), ♀♂ from Mujinamori, Kaminoyama-shi, Yamagata Prefecture, Japan, 7-VI-2003, H. Yoshida leg. — 1–2, Female, dorsal (1) and lateral (2) views; 3, male, dorsal view. Scales: 1 mm.



**Figs. 4–10.** *Yunohamella yunohamensis* (Bösenberg & Strand 1906), ♀♂ from Mujinamori, Kaminoyama-shi, Yamagata Prefecture, Japan, 7-VI-2003, H. Yoshida leg. — 4–5, Epigynum, ventral (4) and lateral (5) views; 6–8, male left palpus, prolateral (6), ventral (7) and retrolateral (8) views; 9–10, same (expanded), prolateral (9) and ventro-retrolateral (10) views. Abbreviations: C, conductor; E, embolus; M, median apophysis; P, paracymbium; S, subtegulum; T, tegulum; TA, tegular apophysis. Scales: 0.1 mm.

consists of four Japanese species (*takayensis*, *chikunii*, *latifolius* and *fujisawai*) and ten Chinese ones (*kunmingicus*, *naevius*, *lushanensis*, *xui*, *linimaculatus*, *wangi*, *sublatifolius*, *lunulatus*, *huanrenensis* and *quadrimaculatus*). Three species listed below are newly transferred from *Takayus* to the new genus.

***Yunohamella* new genus**

[Japanese name: Yunohama-himegumo zoku]

**Diagnosis.** The present new genus resembles *Takayus*

Yoshida 2001 (s. str.), but is distinguished from the latter by the following characteristics: color of body basically dark, epigynum without a pointed scapus or with a blunt scapus, and male palpus with a thin embolus and a small tegular apophysis. This genus is similar to *Theridion* Walckenaer 1805 (s. str.) in general appearance, but is distinguishable from it by male palpus with a short and straight embolus, a large tegulum and a conjugated conductor with tegulum, and also by epigynum without depression. In *Theridion*, male palpus with a long and circular embolus, a not large tegulum and a separated conductor, and epigynum with a

distinct depression.

**Description.** Carapace oval and dark. Abdomen globular, and dark, with distinct red to dark brown cardiac pattern (Figs. 1–3; Yoshida 2003, figs. 530, 572–573). Leg formula, 1, 4, 2, 3 in female, 1, 2, 4, 3 in male. Colulus absent. Female genital organ: epigynum with a wide scapus (*yunohamensis*) or without scapus (*subadulta* and *lyrica*), epigastric area with chitin plate; depression indistinct, a pair of openings situated on the middle of atrium, seminal receptacles oval, duct not long (Figs. 4–5; Yoshida 2003, figs. 233–234, 236–237, 239–240). Male palpus: embolus, conductor, median apophysis, tegulum, tegular apophysis, subtegulum, cymbium and paracymbium present, embolus straight and short, conductor membranous and supporting embolus as guide, tegulum large, tegular apophysis small, paracymbium hooded (Figs. 6–10; Yoshida 2003, figs. 235, 238, 241–242).

Three species, *Yunohamella yunohamensis* (Bösenberg & Strand 1906), *Y. subadulta* (Bösenberg & Strand 1906) and *Y. lyrica* (Walckenaer 1842), are newly transferred from *Takayus*. These species are chiefly known from Japan and Korea, though *Y. lyrica* is also distributed in North America.

**Type species.** *Theridion yunohamense* Bösenberg & Strand 1906.

**Etymology.** The generic name is derived from “Yunohama”, which is a type locality of the type species, and is feminine in gender. “Yunohama” is now considered as a misreading for “Yunoharu” which is located in Saga Prefecture, Kyushu.

*Yunohamella yunohamensis*  
(Bösenberg & Strand 1906) **new combination**  
[Japanese name: Yunohama-himegumo]  
(Figs. 1–10)

*Theridium yunohamense* Bösenberg & Strand 1906, p. 145, pl. 10, fig. 185 (holotype: ♀ from Yunohama, Saga, Japan).

*Theridion yunohamense*: Saito 1941, p. 194, fig. 228; Yaginuma 1960, p. 37, pl. 10, fig. 58, text-fig. 35; Yaginuma 1986, p. 35, pl. 8, fig. 8, text-fig. 20–4; Chikuni 1989, p. 42, fig. 57.

*Takayus yunohamensis*: Yoshida 2001, p. 167, fig. 5; Yoshida 2003, p. 95, figs. 233–235, 572.

**Note.** Carapace brown with median and marginal black flecks. Abdomen with reddish cardiac pattern and black flecks (Figs. 1–3). Epigynum with one pair of openings on the middle of sclerotized plate; plate posteriorly projecting (Figs. 4–5). Male palpus with membranous conductor and large tegulum (Figs. 6–10).

**Distribution.** Japan: Hokkaido, Honshu, Shikoku and Kyushu. Korea and Saghalin.

*Yunohamella subadulta*  
(Bösenberg & Strand 1906) **new combination**  
[Japanese name: Koke-himegumo]

*Theridium subadultum* Bösenberg & Strand 1906, p. 147, pl. 5, fig. 42 (holotype: ♀ from Saga, Japan, 28-X-1883, Dönitz leg.).

*Theridion subadultum*: Saito 1941, p. 190, fig. 224; Yaginuma 1960, p. 37, pl. 10, fig. 61; Yaginuma 1986, p. 35, pl. 8, fig. 4, text-fig. 19–12; Chikuni 1989, p. 44, fig. 63.

*Takayus subadultus*: Yoshida 2001, p. 167, fig. 6; Yoshida 2003, p. 97, figs. 236–238, 573.

**Distribution.** Japan: Hokkaido, Honshu, Shikoku and Kyushu. Korea and the Kurile Islands.

*Yunohamella lyrica* (Walckenaer 1842) **new combination**  
[Japanese name: Shimofuri-himegumo]

*Theridion lyricum* Walckenaer 1842, p. 288 (holotype: ♀ from Georgia, U. S. A.) — Yoshida 1987, p. 13, figs. 1–2; Chikuni 1989, p. 44, fig. 63.

*Takayus lyricus*: Yoshida 2001, p. 167; Yoshida 2003, p. 97, figs. 239–242, 530.

**Note.** This species was originally described from North America, and is also distributed widely in Japan.

**Distribution.** Japan: Honshu, Kyushu and Iriomote Is. of the Nansei Islands. Korea and North America.

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